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ABSTRACT OF THE DISCLOSURE

In order to perform synchronization detection with high speed, high precision and high reliability and to measure communication quality (propagation characteristics) at high precision and high efficiency, a mobile station includes synchronization detecting portion for detecting synchronization chip timing of channel to be measured, a synchronization chip timing information portion accumulating information of detected synchronization chip timing, a correlation detecting portion deriving a correlation value between spreading code of the channel to be measured and a received signal for performing communication with a base station and measurement of communication quality with taking the detected synchronization chip timing as a reception chip timing, a time series generating portion for generating a time series data of received signal vector after correlation detection, and a communication quality calculating portion for calculating communication quality from generated time series data.